

### **REMARKS**

This response is intended as a full and complete response to the final Office Action mailed April 28, 2008. In the Office Action, the Examiner notes that claims 1-7, 9-29, 31-36, 38-51 and 53-55 are pending and rejected and claims 45-48 are withdrawn from consideration. By this response, Applicants have amended claims 1, 14, 49 and 54. Support for the amendments may be found in the Applicants' specification on at least page 25, lines 6-23 and page 27, lines 11-19.

In view of both the amendments presented above and the following discussion, Applicants submit that none of the claims now pending in the application are obvious under the provisions of 35 U.S.C. §103. Thus, Applicants believe that all of these claims are now in allowable form.

It is to be understood that Applicants, by amending the claims, do not acquiesce to the Examiner's characterizations of the art of record or to Applicants' subject matter recited in the pending claims. Further, Applicants are not acquiescing to the Examiner's statements as to the applicability of the art of record to the pending claims by filing the instant response including amendments.

### **I. REJECTION OF CLAIMS 1-7, 9-29, 31-36, 38-51 AND 53-55 UNDER 35 U.S.C. § 103**

#### **A. Claims 1, 2, 8, 12 and 13**

The Examiner has rejected claims 1, 2, 8, 12, and 13 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 5,099,319 to Esch et al. (Esch) in view of U.S. Patent 5,446,919 to Wilkins (Wilkins) and U.S. Patent 5,526,034 to Hoarty et al. (Hoarty). Applicants respectfully traverse the rejection.

Applicants' independent claim 1 recites:

1. An apparatus for packaging programs in a television program delivery system wherein the television program delivery system includes a cable television system, comprising:  
a central processor unit (CPU), the CPU comprising program instructions for packaging programs for delivery using the television program delivery system, menu instructions for determining program positioning within each menu of each one of a plurality of cable headends based upon viewer information and

combining a cable headend specific information signal and the packaged program signal for transmission over the television program delivery system via a single signal to said plurality of cable headends, wherein each one of said plurality of cable headends extracts a portion of said single signal based on said cable headend specific information;

a program storage database coupled to the CPU, wherein the programs are stored for packaging;

a viewer information database coupled to the CPU, wherein said viewer information is stored;

an external program source coupled to the CPU, wherein external programs are received at the apparatus;

a delivery control processor unit (DCPU) coupled to and in communication with the CPU, wherein the program control information signal is generated based on information received from the CPU; and

a cable franchise information access module (CFIA), the CFIA, comprising:

a headend information module that analyzes information related to one or more specific cable headends, the information including one of a number of terminals connected to the cable headend, grouping of terminals, terminal configurations, and cable headend equipment; and

a cable franchise control signal generator that generates cable headend specific information signal, wherein the cable headend specific information signal comprises cable franchise information and is integrated with the program control information signal. (Emphasis added).

In an exemplary embodiment, Applicants invention teaches an apparatus for packaging programs comprising a central processor unit (CPU), the CPU comprising program instructions for packaging programs for delivery using the television program delivery system, menu instructions for determining program positioning within each menu of each one of a plurality of cable headends based upon viewer information and combining a cable headend specific information signal and the packaged program signal for transmission over the television program delivery system via a single signal to said plurality of cable headends, wherein each one of said plurality of cable headends extracts a portion of said single signal based on said cable headend specific information. Consequently, a satellite may transmit program information over a single signal to a plurality of cable headends and each cable headend may extract the portions of the program information signal it needs. (See e.g., Applicants' specification, p. 53, ll. 6-8; p. 76, ll. 14-18). Moreover, the program information signal may contain menu instructions such that each cable headend and in turn each terminal may receive

a unique programming menu based on viewer information. (See e.g., Applicants' specification, p. 25, ll. 6-23; p. 27, ll. 11-19).

Esch, Wilkins and Hoarty, alone or in any permissible combination fail to teach or suggest at least the limitations of a central processor unit (CPU), the CPU comprising program instructions for packaging programs for delivery using the television program delivery system, menu instructions for determining program positioning within each menu of each one of a plurality of cable headends based upon viewer information and combining a cable headend specific information signal and the packaged program signal for transmission over the television program delivery system via a single signal to said plurality of cable headends, wherein each one of said plurality of cable headends extracts a portion of said single signal based on said cable headend specific information, as positively recited by Applicants' independent claim 1.

Esch fails to teach or suggest the limitation of a central processor unit (CPU), the CPU comprising program instructions for packaging programs for delivery using the television program delivery system, menu instructions for determining program positioning within each menu of each one of a plurality of cable headends based upon viewer information and combining a cable headend specific information signal and the packaged program signal for transmission over the television program delivery system via a single signal to said plurality of cable headends, wherein each one of said plurality of cable headends extracts a portion of said single signal based on said cable headend specific information. Notably, Esch does not teach or suggest packaging of any programs. Esch only teaches that customized commercials may be inserted into the satellite networks and that a scheduling system determines which commercials play on which networks. (See Esch, col. 3, ll. 54-64). Then each remote site executes the schedule created by the scheduling system. (See *Id.*) In contrast, Applicants' invention teaches that it is the cable headend specific information that instructs the cable headends which portion of the signal to extract. Thus, no "customized" programming is needed. Moreover, Esch is completely devoid of any teaching regarding menu instructions for determining program positioning within each menu of each one of a plurality of cable headends based upon viewer information.

Wilkins fails to bridge the substantial gap left by Esch because Wilkins also fails to teach or suggest an apparatus for packaging programs comprising a central processor unit (CPU), the CPU comprising program instructions for packaging programs for delivery using the television program delivery system, menu instructions for determining program positioning within each menu of each one of a plurality of cable headends based upon viewer information and combining a cable headend specific information signal and the packaged program signal for transmission over the television program delivery system via a single signal to said plurality of cable headends, wherein each one of said plurality of cable headends extracts a portion of said single signal based on said cable headend specific information. Wilkins only teaches a method for targeted advertising. (See Wilkins, generally.) Notably, Wilkins also fails to teach how programs are packaged and menu instructions for determining program positioning within each menu of each one of a plurality of cable headends based upon viewer information. Rather, Wilkins is only concerned with the delivery of advertisements.

In addition, the Applicants respectfully submit that Hoarty fails to bridge the substantial gap between Esch and Wilkins because Hoarty also fails to teach or suggest an apparatus for packaging programs comprising a central processor unit (CPU), the CPU comprising program instructions for packaging programs for delivery using the television program delivery system, menu instructions for determining program positioning within each menu of each one of a plurality of cable headends based upon viewer information and combining a cable headend specific information signal and the packaged program signal for transmission over the television program delivery system via a single signal to said plurality of cable headends, wherein each one of said plurality of cable headends extracts a portion of said single signal based on said cable headend specific information. Hoarty only teaches an interactive home information system with signal assignment. (See Hoarty, Abstract). Therefore, even if Esch, Wilkins and Hoarty were to be permissible combined, the combination of Esch, Wilkins and Hoarty would fail to teach all of the limitations of independent claim 1.

As such, Applicants submit that independent claim 1 and dependent claims 2, 8, 12, and 13 which depend, directly or indirectly, from independent claim 1, are

patentable under 35 U.S.C. §103(a) over Esch in view of Wilkins and Hoarty. Therefore, Applicants respectfully request that the Examiner's rejection be withdrawn.

B. Claims 3-7

The Examiner has rejected claims 3-7 under 35 U.S.C. §103(a) as being unpatentable over Esch, Wilkins, Hoarty and Strubbe in view of U.S. Patent 5,351,075 to Herz (Herz). Applicants respectfully traverse the rejection.

Claims 3-7 depend indirectly from independent claim 1 and recite additional limitations thereof. Moreover, for at least the reasons discussed above, the Esch, Wilkins, Hoarty and Strubbe references fail to teach or suggest Applicants' invention as recited in claim 1 as a whole. Herz does not teach or suggest the missing limitations as stated above. Accordingly, the combination of the Esch, Wilkins, Hoarty and Strubbe references with Herz, in a rejection of dependent claims, would still result in a gap in the combined teachings in regards to the independent claim. As such, Applicants submit that dependent claims 3-7 are patentable under 35 U.S.C. §103 over Esch, Wilkins, Hoarty and Strubbe in view of Herz. Therefore, Applicants respectfully request that the Examiner's rejection be withdrawn.

C. Claim 9

The Examiner has rejected claim 9 under 35 U.S.C. §103(a) as being unpatentable over Esch, Wilkins and Hoarty in view of Florin. Applicants respectfully traverse the rejection.

Claim 9 depends directly from independent claim 1 and recites additional limitations thereof. Moreover, for at least the reasons discussed above, the Esch, Wilkins and Hoarty references fail to teach or suggest Applicants' invention as recited in claim 1 as a whole.

Florin does not teach or suggest the missing limitations. Florin at best teaches the use of a favorites menu generated by a user by depressing a mark button. (See Florin, col. 3, ll. 40-44). Notably, it is not the operations center that generates the unique program positioning within each menu based upon viewer information.

Accordingly, any attempted combination of the Esch, Wilkins and Hoarty references with Florin, in a rejection against the dependent claims, would still result in a gap in the combined teachings in regards to the independent claims. As such, Applicants submit that dependent claim 9 is patentable under 35 U.S.C. §103 over Esch, Wilkins and Hoarty in view of Florin. Therefore, Applicants respectfully request that the Examiner's rejection be withdrawn.

E. Claims 10 and 11

The Examiner has rejected claims 10 and 11 under 35 U.S.C. §103(a) as being unpatentable over Esch, Wilkins and Hoarty in view of Herz. Applicants respectfully traverse the rejection.

Claims 10 and 11 depend directly from independent claim 1 and recite additional limitations thereof. Moreover, for at least the reasons discussed above, the Esch, Wilkins and Hoarty references fail to teach or suggest Applicants' invention as recited in claim 1 as a whole. Herz does not teach or suggest the missing limitations as stated above. Accordingly, any attempted combination of the Esch, Wilkins and Hoarty references with Herz, in a rejection against the dependent claims, would still result in a gap in the combined teachings in regards to the independent claims. As such, Applicants submit that dependent claims 10 and 11 are patentable under 35 U.S.C. §103 over Esch, Wilkins and Hoarty in view of Herz. Therefore, Applicants respectfully request that the Examiner's rejection be withdrawn.

F. Claims 14, 15, 17-19, 25-27, and 31-34

The Examiner has rejected claims 14, 15, 17-19, 25-27 and 31-34 under 35 U.S.C. §103(a) over Wilkins in view of Hoarty and Esch. Applicants respectfully traverse the Examiner's rejection.

Applicants' independent claim 14 recites:

14. A method for packaging programs for delivery to one or more terminals in a network, comprising:
  - collecting user information for one or more users in the network;
  - receiving program information related to available programs;
  - determining a program lineup based on the collected user information and

the program information;

analyzing information related to a specific cable headend to generate a cable headend specific information signal;

communicating at least the cable headend specific information signal from a central processor unit (CPU) to a delivery control processor unit (DCPU), wherein said DCPU is for generating a program control information signal based upon the cable headend specific information signal, wherein said program control information signal contains menu instructions for determining program positioning within said program lineup of each one of a plurality of cable headends based upon the collected user information; and

providing the program lineup to one or more of the terminals by combining the program lineup and the cable headend specific information signal comprising cable franchise information for transmission over the network via a single signal to a plurality of cable headends, wherein each one of said plurality of cable headends extracts a portion of said single signal based on said cable headend specific information, wherein the cable headend specific information signal is integrated with the program control information signal. (Emphasis added).

For at least the reasons discussed above, the Wilkins, Hoarty and Esch references alone or in combination fail to teach or suggest Applicants' invention of independent claim 1 as a whole. Independent claim 14 recites similar relevant limitations as recited in independent claim 1 and, therefore, for at least the same reasons discussed above, Wilkins, Hoarty and Esch fail to teach or suggest the invention recited in independent claim 14 as a whole. Claims 15, 17-19, 25-27 and 31-34 depend directly or indirectly from independent claim 14 and recite additional limitations thereof. As such, for at least the same reasons, dependent claims 15, 17-19, 25-27 and 31-34 are patentable under 35 U.S.C. §103 over Wilkins, Hoarty and Esch.

As such, Applicants submit that independent claim 14 is patentable under 35 U.S.C. §103 over Wilkins in view of Hoarty and Esch. Claims 15, 17-19, 25-27, and 31-34 depend directly or indirectly from independent claim 14 and recite additional limitations thereof. As such, and at least for the same reasons discussed above, such dependent claims are also patentable under 35 U.S.C. §103(a) over Wilkins in view of Hoarty and Esch. Therefore, Applicants respectfully requests that the Examiner's rejection be withdrawn.

G. Claims 16, 24, 35, 36, and 38-40

The Examiner has rejected claims 16, 24, 35, 36, and 38-40 under 35 U.S.C. §103(a) as being unpatentable over Wilkins, Hoarty and Esch in view of Florin and Official Notice. Applicants respectfully traverse the rejection.

For at least the reasons discussed above, the Wilkins, Hoarty and Esch references fail to teach or suggest Applicants' invention recited in independent claim 14 as a whole. Claims 16, 24, 35, 36, and 38-40 depend directly or indirectly from independent claim 14 and recite additional limitations thereof. As such, for at least the same reasons, dependent claims 16, 24, 35, 36, and 38-40 are patentable under 35 U.S.C. §103 over Wilkins, Hoarty and Esch.

Moreover, Florin and the Official Notice asserted by the Examiner fail to bridge the substantial gap left by Wilkins, Hoarty and Esch because Florin and the Official Notice asserted by the Examiner also fail to teach or suggest the missing limitations.

Accordingly, any attempted combination of the Wilkins, Hoarty and Esch references with Florin and the Official Notice asserted by the Examiner, in a rejection against the dependent claims, would still result in a gap in the combined teachings in regards to the independent claims. As such, Applicants submit that dependent claims 16, 24, 35, 36, and 38-40 are patentable under 35 U.S.C. §103 over Wilkins, Hoarty and Esch in view of Florin. Therefore, Applicants respectfully request that the Examiner's rejection be withdrawn.

H. Claims 20 and 21

The Examiner has rejected claims 20 and 21 under 35 U.S.C. §103(a) as being unpatentable over Wilkins, Hoarty and Esch in view of Strubbe.

For at least the same reasons discussed above, the Wilkins, Hoarty and Esch references fail to teach or suggest the invention recited in independent claim 14 as a whole. Claims 20 and 21 depend directly or indirectly from independent claim 14 and recite additional limitations thereof. As such, for at least the same reasons, dependent claims 20-21 are patentable under 35 U.S.C. §103 over Wilkins, Hoarty and Esch. Strubbe does not teach or suggest the missing limitations as stated above.



Accordingly, any attempted combination of the Wilkins, Hoarty and Esch references with Strubbe, in a rejection against the dependent claims, would still result in a gap in the combined teachings in regards to the independent claims. As such, Applicants submit that dependent claims 20 and 21 are patentable under 35 U.S.C. §103 over Wilkins, Hoarty and Esch in view of Strubbe. Therefore, Applicants respectfully request that the Examiner's rejection be withdrawn.

I. Claim 22

The Examiner has rejected claim 22 under 35 U.S.C. §103(a) as being unpatentable over Wilkins, Hoarty, Esch and Strubbe in view of Herz.

For at least the same reasons discussed above, the Wilkins, Hoarty and Esch references fail to teach or suggest the invention recited in independent claim 14 as a whole. Claim 22 depends indirectly from independent claim 14 and recites additional limitations thereof. As such, for at least the same reasons, dependent claim 22 is patentable under 35 U.S.C. §103(a) over Wilkins, Hoarty and Esch. The Strubbe and Herz references do not teach or suggest the missing limitations as stated above.

Accordingly, any attempted combination of the Wilkins, Hoarty and Esch references with Strubbe and Herz, in a rejection against the dependent claims, would still result in a gap in the combined teachings in regards to the independent claims. As such, Applicants submit that dependent claim 22 is patentable under 35 U.S.C. §103 over Wilkins, Hoarty, Esch and Strubbe in view of Herz. Therefore, Applicants respectfully request that the Examiner's rejection be withdrawn.

J. Claim 23

The Examiner has rejected claim 23 under 35 U.S.C. §103(a) as being unpatentable over Wilkins, Hoarty, Esch and Strubbe in view of U.S. Patent 5,027,400 to Baji et al. (Baji).

For at least the same reasons discussed above, the Wilkins, Hoarty, Esch and Strubbe references fail to teach or suggest the invention recited in independent claim 14 as a whole. Claim 23 depends indirectly from independent claim 14 and recites additional limitations thereof. As such, for at least the same reasons, dependent claim

23 is patentable under 35 U.S.C. §103(a) over Wilkins, Hoarty and Esch. The Strubbe and Baji references do not teach or suggest the missing limitations as stated above.

Accordingly, any attempted combination of the Wilkins, Hoarty and Esch references with Strubbe and Baji, in a rejection against the dependent claims, would still result in a gap in the combined teachings in regards to the independent claims. As such, Applicants submit that dependent claim 23 is patentable under 35 U.S.C. §103 over Wilkins, Hoarty, Esch and Strubbe in view of Baji. Therefore, Applicants respectfully request that the Examiner's rejection be withdrawn.

K. Claims 41-44

The Examiner has rejected claims 41-44 under 35 U.S.C. §103(a) as being unpatentable over Wilkins, Hoarty and Esch in view of Herz. Applicants respectfully traverse the rejection.

Independent claim 14 recites similar relevant limitations similar to those recited in independent claim 1 and, therefore, for at least the same reasons discussed above, Wilkins, Hoarty and Esch fail to teach or suggest the invention recited in independent claim 14 as a whole. Claims 41-44 depend directly or indirectly from independent claim 14 and recite additional limitations thereof. As such, for at least the same reasons, dependent claims 41-44 are patentable under 35 U.S.C. §103(a) over Wilkins, Hoarty and Esch. Herz does not teach or suggest the missing limitations as stated above.

Accordingly, any attempted combination of the Wilkins, Hoarty and Esch references with Herz, in a rejection against the dependent claims, would still result in a gap in the combined teachings in regards to the independent claims. As such, Applicants submit that dependent claims 41-44 are patentable under 35 U.S.C. §103(a) over Wilkins, Hoarty and Esch in view of Herz. Therefore, Applicants respectfully request that the Examiner's rejection be withdrawn.

L. Claims 49-51 and 53

The Examiner has rejected claims 49-50 under 35 U.S.C. §103(a) as being unpatentable over Florin in view of Hoarty and Esch. Applicants respectfully traverse the Examiner's rejection.

Applicants' independent claim 49 recites:

49. A method for optimizing program packaging in a program delivery system, comprising:

- selecting one or more programs for packaging;
- determining program start times and dates;
- allocating transponder space;
- setting program prices;
- generating a program menu;
- analyzing information related to a specific cable headend in the program

delivery system to generate a cable headend specific information signal;

- communicating at least the analyzed information related to the specific cable headend from a central processor unit (CPU) to a delivery control processor unit (DCPU), wherein said DCPU is for generating a program control information signal based upon the analyzed information related to the specific cable headend, wherein said program control information signal contains menu instructions for determining program positioning within said program menu of each one of a plurality of cable headends based upon the cable headend specific information;

- packaging the programs and the program control information signal combining said program control information signal with the cable headend specific information signal, wherein the cable headend specific information signal comprises cable franchise information integrated with the program control information signal; and

- transmitting the packaged programs and the combined program control information signal and the cable headend specific information signal via a single signal to a plurality of cable headends, wherein each one of said plurality of cable headends extracts a portion of said single signal based on said cable headend specific information. (Emphasis added.)

The Florin, Hoarty and Esch references alone or in combination fail to teach or suggest Applicants' invention of at least claim 49 as a whole. As discussed above, Florin only teaches the use of a favorites menu generated by a user by depressing a mark button. (See Florin, col. 3, ll. 40-44). Notably, it is not the operations center that generates the unique program positioning within each menu based upon viewer information.

Hoarty fails to bridge the substantial gap left by Florin because Hoarty fails to teach or suggest the limitation of communicating at least the analyzed information related to the specific cable headend from a central processor unit (CPU) to a delivery control processor unit (DCPU), wherein said DCPU is for generating a program control information signal based upon the analyzed information related to the specific cable

headend, wherein said program control information signal contains menu instructions for determining program positioning within said program menu of each one of a plurality of cable headends based upon the cable headend specific information. Hoarty only teaches an interactive home information system with signal assignment. (See Hoarty, Abstract).

In addition, Esch fails to bridge the substantial gap left by Florin and Hoarty because Esch also fails teach or suggest the limitation of communicating at least the analyzed information related to the specific cable headend from a central processor unit (CPU) to a delivery control processor unit (DCPU), wherein said DCPU is for generating a program control information signal based upon the analyzed information related to the specific cable headend, wherein said program control information signal contains menu instructions for determining program positioning within said program menu of each one of a plurality of cable headends based upon the cable headend specific information. Notably, Esch does not teach or suggest packaging of any programs. Esch only teaches that customized commercials may be inserted into the satellite networks and that a scheduling system determines which commercials play on which networks. (See Esch, col. 3, ll. 54-64). Then each remote site executes the schedule created by the scheduling system. (See *Id.*) In contrast, Applicants' invention teaches that it is the cable headend specific information that instructs the cable headends which portion of the signal to extract. Thus, no "customized" programming is needed. Moreover, Esch is completely devoid of any teaching regarding menu instructions for determining program positioning within said program menu of each one of a plurality of cable headends based upon the cable headend specific information.

Accordingly, independent claim 49 is patentable under 35 U.S.C. §103(a) over Florin, Hoarty and Esch. Claims 50-51 and 53 depend directly from independent claim 49 and recites additional limitations thereof. As such, and at least for the same reasons discussed above, dependent claims 50-51 and 53 also are patentable under 35 U.S.C. §103(a) over Florin, Hoarty and Esch. Therefore, Applicants respectfully request that the Examiner's rejection be withdrawn.

N. Claims 54 and 55

The Examiner has rejected claims 54 and 55 under 35 U.S.C. §103(a) as being unpatentable over Florin in view of Hoarty, Wilkins, Esch and Baji. Applicants respectfully traverse the Examiner's rejection.

Independent claim 54 recites relevant limitations similar to those recited in independent claim 49. For at least the reasons discussed above with respect to the Examiner's rejection of independent claim 49, Florin, Hoarty and Esch fail to teach or suggest Applicants' invention recited in independent claim 54 as a whole. Furthermore, Wilkins and Baji fail to bridge the substantial gap between Florin, Hoarty and Esch and Applicants' invention. In particular, Wilkins and Baji, alone or in combination, also fail to teach or suggest at least Applicants' claimed communicating at least the cable headend specific information signal from a central processor unit (CPU) to a delivery control processor unit (DCPU), wherein said DCPU is for generating a program control information signal based upon the cable headend specific information signal, wherein said program control information signal contains menu instructions for determining program positioning within said program menu of each one of a plurality of cable headends based upon the cable headend specific information.

As such, Applicants submit that independent claim 54 is patentable under 35 U.S.C. §103(a) over Florin, Hoarty, Wilkins, Esch and Baji. Claim 55 depends directly from independent claim 54. Accordingly, for at least the same reasons discussed above, claim 55 also is patentable under 35 U.S.C. §103(a) over Florin, Hoarty, Wilkins, Esch and Baji. Therefore, Applicants respectfully request that the Examiner's rejection be withdrawn.

### **CONCLUSION**

Thus, Applicants submit that all of the claims presently in the application are patentable under the provisions of 35 U.S.C §103. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Eamon J. Wall or Jimmy Kim at (732) 530-9404 so that

appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

Dated: \_\_\_\_\_

*6/26/08*

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